IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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SEP 1 5 2005

In re Application of	: Zion Hadad
Serial No.	: 09/624,236
Filed	: July 24, 2000
For	: System and method for cellular communications
Art Unit	: 2634
Examiner	: Ted M. Wang

Honorable Commissioner for Patents
U.S. Patent and Trademark Office
Alexandria, Virginia 22313-1450
U.S.A.

Dear Sir

Petition to Revive an Abandoned Application

In response to the Notice of Abandonment mailed on January 25, 2005, please find attached:

1. A Petition to Revive an Abandoned Application (unintentional)
See attached the **US PTO Credit Card Payment Form** for $685 (small entity).

2. A copy of the Amendment filed by the present applicant in response to the Official Action of February 02, 2004.

The applicant understoods that the Amendment of the Drawings filed in response to the Official Action of September 11, 2003 has been accepted by Examiner. Please acknowledge.

In view of the foregoing, it is believed that this application is now in condition for allowance, subject to the approval of the Petition.

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09/15/2005 TL0111    00000035 09624236
01 FC:1999                      685.00 OP
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Respectfully submitted,

[signature]

Dr Zion Hadad, Applicant   zionh@runcom.co.il
48 Haalmogim Street
Rishon Lezion   DECLARATION
Israel   THIS PETITION IS SENT TODAY BY FAX
TO USPTO, AND A COPY IS PLACED TODAY FOR DELIVERY

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PTO Customer Number : 000047706

Serial No. : 09/624,236

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Honorable Commissioner for Patents

U.S. Patent and Trademark Office

Alexandria, Virginia 22313-1450

U.S.A.

Dear Sir/Madam

Petition to Revive an Abandoned Application

In response to the Notice of Abandonment mailed on January 25, 2005, the applicant has filed a reply on 25 April 2005. see copy attached.

Please let me know if it is OK, or whether there is something more for me to do.

Thank you.

Respectfully submitted,

Dr Zion Hadad, Applicant   zionh@runcom.co.il

48 Haalmogim Street

Rishon Lezion

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Dear Sir

AMENDMENT

In response to the Official Actions of February 02, 2004 and of September 11, 2003, please amend the above-identified patent application as follows:

<u>In the Specification:</u>

Delete the extra character "a" in line 1 of Abstract of the Disclosure.

Following is the Abstract with markings to show the character to be removed:

--<u>**Abstract of the Disclosure**</u>

A ((a)) system for allocating subcarriers to subscribers, comprising a subcarriers allocation controller, connected to a subcarrier modulation unit in a transmitter and to a subcarrier demodulation unit in a receiver for setting a group of subcarriers to be used therein. The transmitter and the receiver are part of the transceiver and subcarriers allocation is made according to a Reed-Solomon code. In a multicarrier system, a method for allocating subcarriers to subscribers, comprising the steps of: A. keep a table of R-S codes for frequency group allocation to base stations; B. assign one set of subcarriers based on R-S codes to a base station; C. assign other sets of subcarriers based on R-S codes to other base stations in such a way that adjacent base stations have different R-S codes, to minimize the number of collision points therebetween.--

The following page includes the corrected Abstract.

--Abstract of the Disclosure

A system for allocating subcarriers to subscribers, comprising a
subcarriers allocation controller, connected to a subcarrier modulation
unit in a transmitter and to a subcarrier demodulation unit in a receiver
for setting a group of subcarriers to be used therein. The transmitter and
the receiver are part of the transceiver and subcarriers allocation is
made according to a Reed-Solomon code. In a multicarrier system, a method
for allocating subcarriers to subscribers, comprising the steps of:
A. keep a table of R-S codes for frequency group allocation to base
stations; B. assign one set of subcarriers based on R-S codes to a base
station; C. assign other sets of subcarriers based on R-S codes to other
base stations in such a way that adjacent base stations have different R-S
codes, to minimize the number of collision points therebetween.--

In page 10, line 12, change the word "second" to --third-- .

The paragraph with markings to show the replaced words:

-- E. a ((second)) <u>third</u> user is assigned carriers in the above groups, as
follows

in group No.	1	2	3	4	5	6	7	8	9	10	11	12 ...
Subcarrier No.	2	10	4	20	8	17	16	11	9	22	18	21 ...--

The corrected paragraph will be as follows:

-- E. a third user is assigned carriers in the above groups, as follows

in group No.	1	2	3	4	5	6	7	8	9	10	11	12 ...
Subcarrier No.	2	10	4	20	8	17	16	11	9	22	18	21 ...--

<u>In the Claims:</u>

Cancel without prejudice all the claims (Claims 1-15) now pending, and
substitute therefor the following new Claims 16 - 26:

--<u>Claims</u>

What is claimed is:

Claims 1-15 (Canceled)

16(New). A system for allocating subcarriers to subscribers, comprising:
    A. a serial to parallel converter for the serial transmit data;
    B. a subcarrier modulation unit connected to said converter;
    C. a subcarriers allocation controller connected to the modulation unit;
    D. a multicarrier modulation unit; and
    E. a parallel to serial converter, which generates the transmit data
out (serial), wherein the subcarriers allocation controller allocates
subcarriers using a Reed-Solomon (R-S) codes scheme, and
wherein the subcarriers allocation controller allocates
subcarriers using a shifted version of a Reed-Solomon (R-S) code that
are separated by more than one step difference.

17(New). The system for allocating subcarriers to subscribers according to
claim 16, wherein the system is a cellular communication system.

18(New). The system for allocating subcarriers to subscribers according to
claim 16, wherein the system is a xDSL communication system.

19(New). The system for allocating subcarriers to subscribers according to
claim 16, wherein a group of 22 carriers is allocated to one user.
another user will be allocated a cycled version of the group.

20(New). In a multicarrier system, a method for allocating subcarriers to
subscribers, comprising the steps of:
    A. keep a table of R-S codes for frequency group allocation to
base stations;
    B. assign one set of subcarriers based on R-S codes to a base
station;
    C. assign other sets of subcarriers based on R-S codes to other
base stations in such a way that adjacent base stations have different R-S
codes, to minimize the number of collision points therebetween.
further including the steps of:

D. where a base station has sectored coverage, a plurality of codes are assigned to that station for use with the various sectors;

E. base station keeps a table of available codes, wherein part of the codes are tagged "free" whereas the others are "in use" ;

F. when a new subscriber gains access through a base station, the subscriber is assigned one or more of the codes for that cell;

G. when a subscriber leaves the cell, his R-S code is tagged as "free";

H. a new subscriber is assigned a shifted version of the code;

I. different codes are allocated in various sectors, and taking into account the code of the nearby cell.

21(New). The method for allocating subcarriers to subscribers according to claim 20, further including the step of allocating several codes to each station for near/far subscribers, and separating far/near subscribers using different codes.

22(New). The method for allocating subcarriers to subscribers according to claim 20, further including the step of allocating several codes to each of several adjacent users within one cell, to decrease the interference resulting from Doppler, phase noise or collissions with other subscribers.

23(New). The method for allocating subcarriers to subscribers according to claim 20, wherein the code includes the subcarriers numbered:

0, 5, 2, 10, 4, 20, 8, 17, 16, 11, 9, 22, 18, 21, 13, 19, 3, 15, 6.

24(New). The method for allocating subcarriers to subscribers according to claim 20, wherein the multicarrier system is a cellular communication system.

25(New). The method for allocating subcarriers to subscribers according to claim 20, wherein the multicarrier system is a xDSL communication system.

26(New). The method for allocating subcarriers to subscribers according to claim 20, wherein a group of 22 carriers is allocated to one user, another user will be allocated a cycled version of the group.--

REMARKS

The present amendment addresses all the Examiner's objections, included in the Official Action of September 11, 2003 , and the formalities included in the Official Action of February 02, 2004.

The new claims only include the claims which were objected to by the Examiner, now in independent form and including all the limitations of intervening claims, or narrower claims depending therefrom, as follows:

New claim 16 comprises previous claims 4, 5 and 7.
In the text of previous claim 4, line 1, change "systems" to --system--.

--16(New). A ((systems)) system for allocating subcarriers to subscribers, comprising:--

New claims 17, 18 and 19 all depend from claim 16 and are belived allowable with that claim.

New claim 20 comprises previous claims 9, 11 and 12. The missing step D is from previous claim 11.

New claim 21 depends on new claim 20, further including the limitations of previous claim 13.

New claim 22 depends on new claim 20, further including the limitations of previous claim 14.

New claim 23 depends on new claim 20, further including the limitations of previous claim 15.

New claims 24, 25 and 26 all depend on new claim 20, further including additional limitations based on the original disclosure, so as not to introduce new matter.

In new claim 16 including the claim 7, the term "adjacent subscribers" was deleted. It has been used in the canceled claim 7.